

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims.

1-14. (Canceled)

15. (Currently Amended) An isolated antibody against the polypeptide of claim 12 or fragment selected from the group consisting of:

I. an antibody that specifically binds to a protein selected from the group consisting of:

- (a) a protein whose amino acid sequence consists of amino acid residues 1 to 223 of SEQ ID NO:2;
- (b) a protein whose amino acid sequence consists of amino acid residues 24 to 223 of SEQ ID NO:2;
- (c) a protein whose amino acid sequence consists of amino acid residues 24 to 173 of SEQ ID NO:2;
- (d) a protein whose amino acid sequence consists of amino acid residues 24 to 128 of SEQ ID NO:2;
- (e) a protein whose amino acid sequence consists of a portion of SEQ ID NO:2, wherein said portion is at least 30 contiguous amino acid residues in length;
- (f) a protein whose amino acid sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 97142; and
- (g) a protein whose amino acid sequence consists of the amino acid sequence of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 97142, wherein said portion is at least 30 contiguous amino acid residues in length; and

II. an isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

- (h) a protein whose amino acid sequence consists of amino acid residues 1 to 223 of SEQ ID NO:2;
- (i) a protein whose amino acid sequence consists of amino acid residues 24 to 223 of SEQ ID NO:2;

- (j) a protein whose amino acid sequence consists of amino acid residues 24 to 173 of SEQ ID NO:2;
- (k) a protein whose amino acid sequence consists of amino acid residues 24 to 128 of SEQ ID NO:2;
- (l) a protein whose amino acid sequence consists of a portion of SEQ ID NO:2, wherein said portion is at least 30 contiguous amino acid residues in length;
- (m) a protein whose amino acid sequence consists of the amino acid sequence of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 97142; and
- (n) a protein whose amino acid sequence consists of the amino acid sequence of a portion of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 97142, wherein said portion is at least 30 contiguous amino acid residues in length,
wherein the antibody or fragment thereof specifically binds the protein.

16-20. (Canceled)

- 21. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(a).
- 22. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(b).
- 23. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(c).
- 24. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(d).
- 25. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(e).
- 26. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(f).
- 27. (New) An antibody or fragment thereof that specifically binds the protein of claim 15(g).

28. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(h).

29. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(i).

30. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(j).

31. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(k).

32. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(l).

33. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(m).

34. (New) An antibody or fragment thereof obtained from an animal immunized with the protein of claim 15(n).

35. (New) The antibody or fragment thereof of claim 15 wherein said protein bound by said antibody or fragment thereof is glycosylated.

36. (New) The antibody or fragment thereof of claim 15 wherein said antibody or fragment thereof is monoclonal.

37. (New) The antibody or fragment thereof of claim 15 which is selected from the group consisting of:

- (a) a chimeric antibody or fragment thereof;
- (b) a human antibody or fragment thereof;
- (c) a humanized antibody or fragment thereof;

- (d) a single chain antibody;
- (e) a Fab fragment; and
- (f) a polyclonal antibody.

38. (New) The antibody or fragment thereof of claim 15 which is labeled.

39. (New) The antibody or fragment thereof of claim 15 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot or an ELISA.

40. (New) An isolated cell that produces the antibody or fragment thereof of claim 15

41. (New) A hybridoma that produces the antibody or fragment thereof of claim 15

42. (New) A method of detecting a protein in a biological sample comprising:

- (a) contacting the biological sample with the antibody or fragment thereof of claim 15; and
- (b) detecting the protein in the biological sample.

43. (New) An isolated antibody or fragment thereof that specifically binds a protein expressed on the surface of a cell wherein said protein is encoded by a polynucleotide encoding amino acids 1 to 223 of SEQ ID NO:2.